

Should One Size Fit All? Competitive Procurement for New Base Load Power Plants

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Solving our national security and environmental threats will require the US electric sector to build new base load generation that reduces global warming and decreases our dependency on imported oil and natural gas. The Energy Policy Act of 2005 (EPAct 2005) acknowledged this need by providing incentives for new nuclear, integrated gasification combined cycle (IGCC) and other energy efficient coal generating facilities. In late 2005 and into 2006 many utilities announced a planning process for new base load generation, most with the expectation of receiving EPAct 2005 tax incentives and other risk reduction guarantees for nuclear and efficient coal plants. 2007 appears to be the year that federal and state regulators and legislative bodies will establish the processes and enact laws and regulations to bring it about. The following are representative initiatives:

This past February the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners (NARUC) announced they will conduct a collaborative dialogue on cross-jurisdictional issues related to competitive power procurement.

Many southern state legislatures are evaluating and starting to implement laws that will reduce risk to vertically integrated electric utilities (VIEU) associated with building new base load coal and nuclear plant.

The FERC held a technical conference on competition in wholesale electric markets on February 27 that provided input from a broad range of stakeholders that included comments on competitive procurement of new generation resources.

The organized wholesale markets continue to evaluate implementing centralized installed capacity markets (ICAP) or remove price caps to allow generation developers to recover the cost of building new base load units. The Southern state legislatures are actively evaluating legislation that will reduce the risk for the VIEU to build new base load generation. Virginia has enacted legislation that would pull back competitive retail markets and return to a VIEU model, which reinstates traditional incentives for the state's utilities to build new generation. This reversal of course is easier to accomplish because neither Dominion Virginia Power nor AEP ever sold off their generation fleet, unlike most of the northeast utilities that divested a significant portion of theirs. The South and North Carolina legislatures are also discussing mechanisms that will reduce the risk of recovery of new base load generation units for their VIEUs, including recovering cost before the plants are put into service.

Only about a third of the states have competitive power procurement rules in place. In organized markets they are not needed because either the consumer is choosing individually or default service solicitation or auctions are used to secure power. In states with bilateral wholesale markets, only Oregon, Utah and Georgia have competitive procurement rules. However, Georgia Power recently filed a request with the state commission to exempt new base load coal and nuclear plants from these rules.

The FERC technical conference last week outlined some of the positions of the different stakeholders that want to build these next units. John Shelk, CEO of the Electric Power Supply Association (EPSA) stated "Competitive procurement is so important precisely because the risks to consumers of rate base investments are as high as or even higher than ever before." He went on to say; "Those who oppose obtaining power generation through a competitive mechanism raise several myths that are easily refuted. The first myth is that only rate base utilities can and should build new base load coal and nuclear plants. The fact is that competitive suppliers are already operating a fuel diverse fleet of coal, natural gas, nuclear and renewable facilities."

2007 will be a watershed year, in that the regulatory processes that will determine the players who will build these new base load facilities will be defined. From the presentation at the FERC on February 27, it appears that the merchant generation sector believes that there is a high probability that they will be excluded from the new building process in states outside of the competitive markets. In the competitive markets, where generation has been unbundled from retail distributors, merchant generators have an advantage because of their dominant positions. Over 90% of New England is presently served by merchant generators and in many other states with competitive retail markets they serve 50% or more of the load. Distribution utilities in the competitive markets by law and regulatory mandate, supply default service customers from power supply procurements on a short term basis of three years or less.

So why don't the merchant generators that now control 40% of all US generating capacity concentrate their marketing efforts in the competitive markets and compete in VIEU areas when the process favors them? The answer is (with the exception of Texas) there is little power plant construction activity in the competitive states. Local distribution companies and their regulators in the competitive markets have forgone chasing the federal tax subsidies for new nuclear and coal plants. Large increases in retail prices and indecision on ICAP markets which would cause them to be even higher, has taken their attention. I am not aware of any retail customer in these competitive markets that has signed a long term contract to buy from a new base load facility. The VIEUs, especially in the Southeast, who enjoy low prices and high customer favorability ratings are chasing the federal tax subsidies and seeking state legislation that will reduce their building risks.

The forum last week was centered on competition in wholesale markets and competitive procurement was only one part of it. The collaborative joint dialogue between the FERC and NARUC will solely concentrate on competitive procurement and hopefully a better dialogue will result. However, after listening to most of the presentations that day, I

found that a fundamental discussion of risk was lacking. EPSA, representing the merchant generation sector, represented that there would be great risk if competitive procurement did not take place and result in the ruination of the electric power business in VIEU markets. The VIEUs for the most part were mute, as competitive procurement was being framed under the umbrella of a technical conference on competitive wholesale markets and not under the framework of the efficiencies of vertical integration.

The first risk question that regulators and legislators have to ask is: can new base load plants be built without the guarantee of their retail customers to underwrite a significant portion of the risk? As we saw in the last major build cycle, there was no lack of capital for new gas turbines and many were built without long term off take agreements. If capital is available without the retail customers underwriting the risk, especially the risk of a long term contract or plant performance, then the regulators should definitely undergo a competitive procurement process. However, if the VIEU's bundled retail customer is needed to underwrite a significant portion of the risk in order to raise capital, then a competitive procurement process may not be needed.

I base this statement on an understanding of the different risk fundamentals of a VIEU rate basing a new facility or signing a long-term purchase power agreement with a merchant generator. As we saw with the bankruptcies of many merchant generators, the bankruptcy trustees would often try to terminate a purchase power agreement (PPA) that had a favorable market value for the buyers, yet steadfastly defend a PPA that was in their favor. A PPA can often be a greater risk than rate basing a generation unit for a VIEU. If the PPA is underwritten by the balance sheet of the General Electric Corporation, then this would not be a significant risk. However, if the PPA is underwritten by a limited liability corporation (LLC) that solely has the generating plant as its only asset or a merchant generator's balance sheet that does not have a strong credit rating, the VIEU self build option could provide lower risk for the VIEU's retail customers. The risk can also be mitigated for the PPA where the buyers have rights to a particular unit during bankruptcy. However, for base load units with new technology units that are not yet built, the risk is different than buying the output from an existing generator. Most areas of the country have yet to experience a VIEU going bankrupt, yet almost all areas have experienced merchant generator bankruptcies and PPA risk to retail consumers.

VIEUs and their state regulators and legislators will probably find out that competitive procurement may make sense for certain types of generating units and not for others. For example many Southeast VIEUs and their regulators and legislatures are trying to capture EPCAct 2005 incentives. There are limited incentives and they will be competing against other builders for guarantees that reduce risk. In that case, a competitive procurement process will probably be counterproductive. However, when a VIEU is seeking a new peaking or intermediate generating resource, a competitive procurement process will often make sense.

A reader in response to a recent article I wrote stated: "In most areas of the US, 60% of the generation capacity serves 90% of the energy and 40% serves the remaining 10% of the energy. Putting base load generators in rate base and competitively procuring for the intermediate and peaking resources may be the best solution". I am not sure that this is the ultimate solution or it is some other combination. However, I am sure that it is not one extreme or the other. This year a lot of suggestions will be given to federal and state regulators and legislative bodies on the best way to obtain the lowest cost generators to solve our environmental and national security problems. What I am sure of is that a "One size fits all" procurement methodologies will not provide the solution. If you have comments on how competitive procurement fits into a VIEU generation portfolio, please contact George Campbell (gcampbell@utilipoint.com).